

assessment outcomes, 2) analyze correlations between additional benefit, budget impact and negotiated rebate. **METHODS:** To achieve objective 1, assessments by the GBA and the IQWiG (Institute for Quality and Efficiency in Healthcare) (source: GBA website) were scanned for key trends. To achieve objective 2, list and post-negotiation prices were extracted from the Lauer-Taxe (German price database). For the 10 agents that had so far completed price negotiations, these were mapped against additional benefit and the budget impact (annual therapy costs as stated in GBA assessment). **RESULTS:** The results linked to objective 1, which were more qualitative in nature, allowed for the extraction of 5 key learnings for manufacturers to keep in mind. The results associated with objective 2 showed no link between additional benefits granted and negotiated rebate but did reveal price impacting parameters apart from budget impact. **CONCLUSIONS:** Concerning objective 1, the ways in which manufacturers can attempt to optimize benefit outcomes include: 1. Focus on comparator choice, 2. Focus on hard endpoints, 3. Make patient segmentation more solid, 4. Expect independent action of GBA and IQWiG and 5. Accept that there is no methodological standard for the definition of an additional benefit. Regarding objective 2, we concluded that budget impact, influenced primarily by target population size, annual therapy costs and drug price, is an – if not the most important driver in the negotiation.

PHP22**IS DRUG INNOVATION STILL REWARDED IN THE TOP 5 EUROPEAN PHARMACEUTICAL MARKETS?**Reinaud F¹, Ando G²¹IHS, Paris, France, ²IHS, London, UK

OBJECTIVES: To assess how drug innovation is rewarded and how it is impacted by cost-containment policies. **METHODS:** Manufacturer prices per unit of package and strengths were compared and assessed in a basket of 97 innovative drugs approved by the European Medicines Agency (EMA) since 2000. The products were still patent protected, and available in each of the top 5 European pharmaceutical markets. **RESULTS:** Prices of innovative drugs in Germany were still the highest and had a benchmark price index of 100. In France, when drugs were deemed innovative, premium prices were granted – resulting in a price index of 94 – but significantly decreased over time. While prices at launch in Italy, Spain and the UK were commonly lower – with price indexes of 89, 88 and 86 respectively – they tended to remain constant over time. **CONCLUSIONS:** Despite the fact that governments in developed markets are attempting to lower prices, differences still exist across the largest markets, enabling pharmaceutical companies to implement differential and protective pricing strategies. In Germany, time to market is comparatively fast and premium prices at launch have been granted. In future, the AMNOG reform will complicate this picture, although pricing premiums have still been achieved for drugs deemed innovative that have gone through the full AMNOG process. In France, although prices are relatively high at launch, they drop at time of renewal and innovation is granted to a limited number of drugs. Prices have been comparatively low at launch but remain constant in Italy and Spain, reflecting the fact that price cuts in those countries have often been directed towards generics, although these are still considered high-risk markets. In the UK, it remains to be seen how the value-based pricing reform will impact prices.

PHP23**ACCESSIBILITY OF ORPHAN DRUGS IN FRANCE, UNITED KINGDOM AND GERMANY: DIFFERENT APPROACHES WITH REGARD TO HTA AND PRICES**

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OBJECTIVES: To describe availability of orphan drugs in France, UK and Germany and to compare agencies' assessments and prices. **METHODS:** All the products designated as orphan drugs by the European Commission and commercialized at least in one of the three countries were included in the study. Comparison of prices is made per dosage and is based on prices per standard unit, using IMS MIDAS database. Comparison of assessments is based on Transparency Committee opinions, NICE guidances and IQWiG benefit assessments. **RESULTS:** Sixty-two products (103 dosages/forms) were included in this study; 47 (76%; 84 dosages/forms) are commercialized in the 3 countries, 8 (13%) products in only 2 countries (6 both in Germany and UK and 2 both in Germany and France) and 7 (11%) only in 1 country (6 in Germany only and 1 in France only). Among the 84 products/dosage/forms available in the three countries, most of them are available at hospital (respectively 68, 70 and 77 in Germany, France and UK) but those available through retail pharmacists are much numerous in Germany (72 of them) than in France (29) or UK (30). German and UK manufacturer March 2013 retail prices more often higher than French one, despite the fact that among the 49 orphan drugs commercialized in France, 31 are innovative products (ASMR rate I to III). For instance, French assessment of pirfenidone was less favorable than the Germans' one, and German price is thus +65.2% higher than French price. French and UK HTA assessments for azacitidine were both positive and led to similar prices. **CONCLUSIONS:** Most orphan drugs are available in the three studied countries but accessibility to them seems to be different and depends on HTA results.

PHP24**COMPARISON RETAIL PRICES OF DRUG PRICES BETWEEN TURKEY AND EUROPEAN COUNTRIES**Kockaya G¹, Atikeler K², Esen A³, Tuna E²¹Health Economics and Policy Association, Ankara, Turkey, ²Hacettepe University, Ankara, Turkey,³Yeditepe University, Istanbul, Turkey

OBJECTIVES: The reference pricing system is used for setting drug prices in Turkey since 2006. There are 5 reference countries following; Spain, Italy, Germany, France and Greece. Except those countries, manufactured or imported countries may be used as reference countries. Reference prices are reviewed time by time and may be subject to certain alterations, but evaluation of box prices may be different if evaluation made based on milligram. The aim of this study is to evaluate differences of average milligram sales prices of some generic medicines between Turkey

and European countries. **METHODS:** Comparison of milligram based prices analysis between European countries done by Intelligent Health System(IHS) was used. The analysis of IHS included Germany, France, United Kingdom(UK), Spain and Italy(EU5). Comparison was done with taken row data of analysis EU5 and Turkey average milligram retail prices of Ceftriaxone, Clopidogrel, Esomeprazole, Fentanyl, Lamotrigine, Levofloxacin, Metformin, Venlafaxine, Letrozole and Olanzapine molecules. **RESULTS:** It has been reported that compared 10 molecules highest average milligram based prices of Esomeprazole(0,043 €), Levofloxacin(0,058 €) and Clopidogrel(0,0083 €) molecules belong to Turkey, Lamotrigine(0,01 €) belongs to Germany. The highest average milligram based prices of other 6 molecules belong to UK with following; Ceftriaxone(0,0196 €), Fentanyl(0,186 €), Letrozole(1,24 €), Metformine(0,00013 €), Venlafaxine(0,0074 €), Olanzapine(0,261 €). **CONCLUSIONS:** It has known that because of UK used free pricing mechanism on drugs, prices of drugs are higher than other compared countries. This situation established on the analysis. But despite of Turkish Government policy decisions; it is important indication that 3 drugs represents highest prices out 10 drugs. Reference pricing system applied based on box price. Better control mechanism may achievable if milligram based pricing apply in Turkey. On the other hand because of the study only consist retail sales prices the evaluation should be done from point of reimbursement prices on future studies.

PHP25**CONSUMPTION OF BIOSIMILAR DRUGS IN CAMPANIA REGION IN THE YEARS 2009-2012**Menditto E¹, Cammarota S¹, Putignano D¹, Orlando V¹, Fiorentino F²¹CIRFF-Center of Pharmacoeconomics, Naples, Italy, ²Regional Health Authority of Campania region, Naples, Italy

OBJECTIVES: The expiration of biotech drugs patent has led to the creation of drugs copies of originator products, defined 'biosimilars'. No European country allows automatic substitution between the originator and the biosimilar. In Italy, due to the lack of a national legislation, some Regions have issued directives to encourage the use of biosimilars, recognizing a potential saving of resources. Campania Region was the first region to legislate on the matter, (decree no. 15 of 11.30.2009) supporting the prescription of biosimilars to the naive patient. The aim of our study is to describe trends in biosimilars consumption in Campania region and evaluate how biosimilar products are replacing the originators in the respective markets. **METHODS:** IMS Health regional database was used to analyze biosimilar drugs consumption patterns (erythropoietins, G-CSF, somatropin) in the years 2009- 2012. Information was retrieved about different distribution channels (retail, direct distribution, hospital). Consumptions are expressed in Counting Units (CU) and trends have been calculated using Compound Average Grow Rate (CAGR). The study especially focused on consumption trends of erythropoietin (ATC B03XA) in the years 2009-2012. **RESULTS:** In 2012 the penetration rate of biosimilars was 40.1% (evaluated as the biosimilars share of the total erythropoietins, G-CSF, somatropin market). These values are double than those at national level, that are estimated to be 19.7% of consumption. Focus on erythropoietin trends showed a strong increase in biosimilars consumption (451 CU in 2009 vs 140,327 CU in 2012) after the introduction of regional measures to promote the prescription of biosimilars to the naive patient. In 2012, biosimilar erythropoietins and reference drugs show similar market shares (37.0% and 33.7% of the total erythropoietins market respectively) showing a high substitution effect. **CONCLUSIONS:** Our analysis outlines the significant effects of regional measures on market penetration rates of biosimilars.

PHP26**INDIRECT AND DIRECT SAVINGS RESULTED FROM PARALLEL TRADE OF PHARMACEUTICALS IN POLAND – RESULTS OF VALUATION SALES DATA FROM PUBLIC PHARMACIES**

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OBJECTIVES: Estimation of the direct and indirect savings generated by parallel importing (PI) of pharmaceutical products in public pharmacies in Poland, and estimation of the savings for the payer in the case of reimbursed drugs. **METHODS:** IMS Health Poland National Sales Data (2005-2012) and data from respective reimbursement lists were used for all calculations. Direct savings were estimated considering all PI products sold in public pharmacies(433 products, 1550 SKUs). To avoid overestimation, only 18 products that passed restrictive criteria were used for calculations of indirect savings. Twenty-seven reimbursed products were used for the payer savings calculations. Direct savings were calculated as a difference between PI and reference product prices multiplied by the number of packs of PI product. Indirect savings were calculated as a difference between the reference product price and the theoretical reference product price (i.e. prices in a hypothetical situation where there is no price pressure caused by PI – calculated using linear regression). Indirect savings considered only those products which met the criteria of the reference product's price decrease of at least 5% within 3 months prior to, or after, the appearance of the PI product. **RESULTS:** Study revealed that the savings generated by the PI of pharmaceuticals in Poland between 2005-2012 may be estimated at the level of EUR 146m (direct savings EUR 46m and indirect savings EUR 100m). Savings for the payer calculated for reimbursed products between 2008-2012 reached the level of EUR 0.06m. **CONCLUSIONS:** This is the first study estimating direct and indirect savings coming from PI phenomena covering all years since PI was reinforced by Poland's accession to the EU. It has been found very interesting that indirect savings tend to be substantially higher than direct ones. This indicates that high price pressure is created by PI, and affects the prices of reference products.

PHP27**PRICING OF “FOLLOW-ON” DRUGS AND COMPETITION WITHIN PHARMACEUTICAL CLASSES: EVIDENCE FROM GERMANY 1993-2008**Mueller MT¹, Frenzel A²¹Universität Witten/Herdecke, Witten, Germany, ²IMS Health, Frankfurt/Main, Germany